

**Amendments to the Claims:** This listing of claims will replace all prior versions, and listings, of claims in the application

Listing of Claims:

1 - 6. (Canceled)

7. (Canceled)

8. (Currently Amended) A method for increasing an ~~early-fruit number or fruit weight~~ in a nonleguminous plant comprising the steps of applying to the plant a first dose of a lipochitooligosaccharide (LCO) at a concentration of from about 1 ng to about 1000 ng per plant; and applying to the plant a second dose of an LCO at a concentration of from about 1 ng to about 1000 ng per plant.

9. - 16. (Canceled)

17. (Currently Amended) The method of claim 8, wherein the nonleguminous plant is of the family ~~Brassicaceae, Solonaceae, Chenopodiaceae, Asteraceae, Malvaceae, Cucurbitaceae, or Poaceae.~~

18. (Previously Presented) The method of claim 8, wherein the LCO is applied at a concentration of from about 10 ng per plant to about 100 ng per plant.

19. (Currently Amended) The method of claim 8, wherein the nonleguminous plant is a tomato plant, a pepper plant, or a ~~strawberry~~ corn plant.

20. (Previously Presented) The method of claim 18, wherein the LCO is applied at a concentration of from about 50 ng per plant to about 75 ng per plant.

21. (Currently Amended) A method for increasing an ~~early-flower number biomass or yield~~ in a nonleguminous plant comprising the steps of applying to the plant a first dose of a lipochitooligosaccharide (LCO) at a concentration of from about 1 ng to about 1000 ng per plant; and applying to the plant a second dose of an LCO at a concentration of from about 1 ng to about 1000 ng per plant.

22. **(Currently Amended)** The method of claim 21, wherein the nonleguminous plant is of the family ~~*Fabaceae*~~*Brassicaceae*, ~~*Solanaceae*~~, ~~*Chenopodiaceae*~~, ~~*Asteraceae*~~, ~~*Malvaceae*~~, ~~*Cucurbitaceae*~~, or ~~*Poaceae*~~.
23. **(Previously Presented)** The method of claim 21, wherein the LCO is applied at a concentration of from about 10 ng per plant to about 100 ng per plant.
24. **(Currently Amended)** The method of claim 21, wherein the nonleguminous plant is a tomato ~~soybean~~ plant.
25. **(Canceled)**
- 26-27. **(Canceled)**
- 28-30. **(Canceled)**
- 31-33. **(Canceled)**
34. **(Currently Amended)** The method of claim 8, ~~wherein the step of applying an LCO comprises applying a first dose of LCO and a second dose of LCO,~~ wherein the second dose is applied between about two weeks to about six weeks after the first dose.
35. **(Currently Amended)** The method of claim 21, ~~wherein the step of applying an LCO comprises applying a first dose of LCO and a second dose of LCO,~~ wherein the second dose is applied at least three ~~about two weeks~~ after the first dose.
36. **(Currently Amended)** The method of claim 8, ~~comprising applying~~wherein the LCO is applied to the foliage of the plant.
37. **(Currently Amended)** The method of claim 21, ~~comprising applying~~wherein the LCO is applied to the foliage of the plant.
38. **(Canceled)**
39. **(Canceled)**
40. **(New)** A method for increasing fruit number, fruit weight, biomass, or yield in a tomato plant, pepper plant, or soybean plant comprising the steps of applying to the plant a first dose

of a lipochitooligosaccharide (LCO) at a concentration of from about 10 ng to about 100 ng per plant; and applying to the plant a second dose of an LCO at a concentration of from about 10 ng to about 100 ng per plant, wherein the second dose is applied between about two weeks to about six weeks after the first dose.